Amendments to the Claims:

Please cancel claims 1-29 presented in the underlying International Application No. PCT/DE2004/000255 without prejudice, and add new claims 30-58 as shown in the listing of claims.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-29 (canceled)

Claim 30 (new): An apparatus for the spectral selection and detection of spectral regions of a light beam, the apparatus comprising:

a first selection unit including:

a first spectral splitting device configured to spectrally split the light beam; and

a first light blocking and reflecting device configured to block a first spectral region and reflect at least part of an unblocked second spectral region; and

a first detection unit including a plurality of first detectors, at least one of the first detectors being disposed in a first beam path of the blocked second spectral region, at least one of the first detectors being disposed in a second beam path of the reflected first spectral region, each of the first detectors having a respective different detection property or using a respective different detection method.

Claim 31 (new): The apparatus as recited in claim 30 further comprising:

a second light blocking and reflecting device configured to block a third spectral region of the reflected first spectral region or the unblocked second spectral region, and to reflect an unblocked fourth spectral region of the reflected first spectral region or the unblocked second spectral region; and

a second detection unit including a plurality of second detectors, at least one of the second detectors being disposed in a third beam path of the blocked third spectral region, at least one of the second detectors being disposed in a fourth beam path of the reflected fourth spectral region, each of the second detectors having a respective different detection property or using a respective different detection method.

Claim 32 (new): The apparatus as recited in claim 31 wherein the second light blocking and reflecting device and the second detection unit are disposed in a cascaded arrangement with the first light blocking and reflecting device and the first detection unit.

Claim 33 (new): The apparatus as recited in claim 30 wherein the plurality of first detectors includes at least three detectors, and the first light blocking and reflecting device is configured to at least one of block or reflect at least a respective spectral region to each of the at least three detectors.

Claim 34 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is configured to divide an entire spectrum into a plurality of predefinable fractions.

Claim 35 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is configured to provide a neutral spectral division.

Claim 36 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is configured to provide a polarization-dependent division.

Claim 37 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device and the plurality of first detectors are disposed in a common module.

Claim 38 (new): The apparatus as recited in claim 30 wherein at least one of the first detectors includes at least one photomultiplier.

Claim 39 (new): The apparatus as recited in claim 30 wherein at least one of the first detectors includes at least one photodiode.

Claim 40 (new): The apparatus as recited in claim 30 wherein at least one of the first detectors includes an avalanche photo-diode.

Claim 41 (new): The apparatus as recited in claim 31 wherein the first light blocking and reflecting device and the second light blocking and reflecting device are configured so that only one of the first and second light blocking and reflecting devices is active at a time.

Claim 42 (new): The apparatus as recited in claim 31 wherein the first light blocking and reflecting device and the second light blocking and reflecting device are configured so that both of the first and second light blocking and reflecting devices are simultaneously active.

Claim 43 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is configured to spectrally split the light beam into a predefinable ratio.

Claim 44 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device includes a mirror slide openable at least partially.

Claim 45 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is disposed in a flat arrangement.

Claim 46 (new): The apparatus as recited in claim 30 wherein the first light blocking and reflecting device is disposed in a three-dimensional arrangement.

Claim 47 (new): The apparatus as recited in claim 31 further comprising an optical device configured to adapt an image and disposed between the first light blocking and reflecting device and the second light blocking and reflecting device.

Claim 48 (new): The apparatus as recited in claim 47 the optical device is configured to image split focus lines into the second light blocking and reflecting device.

Claim 49 (new): The apparatus as recited in claim 47 the optical device includes a lens.

Claim 50 (new): The apparatus as recited in claim 30 further comprising an optical device disposed in front of at least one of the first detectors and configured to reverse the spectral splitting.

Claim 51 (new): The apparatus as recited in claim 50 wherein the optical device includes a prism.

Claim 52 (new): The apparatus as recited in claim 30 further comprising a shutter disposed in the first or second beam path in front of at least one of the first detectors configured to open for a detection.

Claim 53 (new): The apparatus as recited in claim 52 wherein the shutter is configured to close automatically as a function of an amount of light striking the at least one of the first detectors during the detection.

Claim 54 (new): The apparatus as recited in claim 30 wherein the first detectors are configured to be cooled.

Claim 55 (new): The apparatus as recited in claim 30 further comprising electronics adapted to a type of the first detectors and connected downstream from the first detectors.

Claim 56 (new): The apparatus as recited in claim 30 wherein a cabling of at least one of the first detectors is adapted in terms of at least one of a cable length, a resistance, and an impedance to a type of at least one of the first detectors.

Claim 57 (new): The apparatus as recited in claim 30 further comprising:

a second light blocking and reflecting device configured to block a third spectral region not reflected or blocked by the first light blocking and reflecting device, and to reflect a fourth spectral region not reflected or blocked by the first light blocking and reflecting device; and

a second detection unit including a plurality of second detectors, at least one of the second detectors being disposed in a third beam path of the blocked third spectral region, at least one of the second detectors being disposed in a fourth beam path of the reflected fourth spectral region, each of the second detectors having a respective different detection property or using a respective different detection method.

Claim 58 (new): A scanning microscope comprising an apparatus for the spectral selection and detection of spectral regions of a light beam, the apparatus comprising:

a first selection unit including:

a first spectral splitting device configured to spectrally split the light beam; and

a first light blocking and reflecting device configured to block a first spectral region and reflect at least part of an unblocked second spectral region; and

a first detection unit including a plurality of first detectors, at least one of the first detectors being disposed in a first beam path of the blocked second spectral region, at least one of the first detectors being disposed in a second beam path of the reflected first spectral region, each of the first detectors having a respective different detection property or using a respective different detection method.